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Filed : November 24, 2003

#### REMARKS

Claims 1-19, 21-27, and 30-46 were pending in the application. By this paper, Applicant has amended Claims 12, 41, and 43, and cancelled Claims 1-11, 19, 21, 23-27, 30-33, 38-40 and 45-46 without prejudice. Accordingly, Claims 12-18, 22 and 34-37, 41-44 are presented for examination herein.

#### *Claim Objections*

1. At page 2 of the Office Action, Claim 12 is objected-to as containing typographical errors. By this paper, Applicant has amended Claim 12, thereby correcting any deficiencies therein.

2. Also at page 2 of the Office Action, Claims 38-45 are objected-to as containing abbreviations which are not defined.

By this paper, Applicant has amended Claims 41 and 43 to appropriately define the first instance of any abbreviations occurring therein. No new matter has been added.

Without commenting on the merit or propriety of the objection to Claims 38-40 and 45, Applicant has by this paper cancelled these without prejudice, thereby rendering the objections thereto moot.

#### *§112 Rejections*

Per page 3 of the Office Action, Claims 26, 31, and 43 stand rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

1. Without commenting on the merit or propriety of the §112 rejections of Claims 26 and 31, Applicant has by this paper cancelled Claims 26 and 31 without prejudice, thereby rendering the Office's rejections thereof moot.

2. With respect to Claim 43 it is argued that the term "substantially" is indefinite. By this paper, Applicant has amended Claim 43 to cure any alleged deficiencies.

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*§103 Rejections*

1. At page 3 of the Office Action, Claims 1 and 13-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Evans, et al. (U.S. Patent No. 7,552,450; hereinafter “Evans”) in view of Peterka, et al. (U.S. Patent No. 7,487,534; hereinafter “Peterka ‘534”). In response thereto, Applicant provides the following.

**Claim 1** – Without addressing the merit or propriety of the §103 rejection of Claim 1 with respect to Evans and/or Peterka ‘534, Applicant has by this paper cancelled Claim 1 without prejudice, thereby rendering the rejection thereof moot.

**Claim 13** – Applicant respectfully traverses the §103 rejection of Claim 13 as being unpatentable over Evans in view of Peterka ‘534.

Applicant notes that “*To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.*” *In re Royka*, 490 F.2d 981 (CCPA 1974). See MPEP 2143.03.

At page 6 of the Office Action, it is asserted that Evans discloses “*wherein said data relating to said hardware options comprises information regarding individual ones of said plurality of software interfaces which may be used to access individual ones of said hardware options (“...Each entry in the component register...” Col. 2, Ln. 22-28, “...device’s registration adds entries to the component register...” Col. 7, Ln. 22-25, Data Fields 512-520, Col. 8, Ln. 55-67, Col. 9, Ln. 1-9.)*” Applicant disagrees.

Evans does not teach or suggest the aforementioned. Rather, at e.g., col. 2, lines 22-28 Evans merely discloses maintaining a device registry having information relating to the component’s capabilities (a so-called “capabilities list”). The capabilities of the components include for example, “*the actions the digital media component can invoke, the name of the vendor or manufacturer of the component, metadata about the device, types of media it supports, applications for which it is certified and other digital media components with which the component is compatible*” (see e.g., col. 8, lines 1-6 of Evans). Even if one assumes *arguendo*

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that the components in Evans comprise a plurality of hardware options (a point which Applicant does not necessarily concede), nowhere does Evans disclose the capabilities list comprising information relating to *software interfaces* which may be used to access individual ones of the component's hardware options. It is Applicant's position that the presence of a device registry as  
5 in Evans in no way necessitates the presence of software interface information; should the Office disagree, explicit support for its position is respectfully requested.

Furthermore, at page 5 of the office Action, it appears the Office argues that the API in Evans corresponds to a software application used to provide access to hardware options. However, Evans merely discloses a single API for enabling applications to interface with and  
10 configure components (col. 2, lines 28-31). Evans does not in any way disclose a *plurality* of software interfaces (i.e., a plurality of API) as set forth explicitly in Claim 13, and/or information in the "capabilities list" comprising information specifying individual ones of the plurality of software interfaces (i.e., API) which may be used to access individual ones of the components.

Therefore, Claim 13 distinguishes over the art of record, and is not rendered obvious  
15 thereby.

2. At page 8 of the Office Action, Claims 2-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Evans in view of Peterka '534 and further in view of Meandzija (World Intellectual Property Organization (WIPO) Application Publication No. WO 00/24192;  
20 hereinafter "Meandzija"). In response, Applicant provides the following remarks.

**Claims 2-9** – Without addressing the merit or propriety of the §103 rejections of Claims 2-9 with respect to Evans, Peterka '534, and/or Meandzija, Applicant has by this paper cancelled Claims 2-9 without prejudice, thereby rendering the rejections thereof moot.

**Claims 8-11** – Without addressing the merit or propriety of the §103 rejections of Claims 8-11 with respect to Evans, Peterka '534, and/or Meandzija, Applicant has by this paper cancelled Claims 8-11 without prejudice, thereby rendering the rejections thereof moot.

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3. At page 16 of the Office Action, Claims 12, 41-43, and 45-46 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Peterka '534 in view of Khandelwal, et al. (U.S. Patent No. 7,058,964; hereinafter "Khandelwal"). Applicant provides, in response thereto, the following remarks.

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**Claim 12** – Applicant respectfully traverses the §103 rejection of Claim 12 as being unpatentable over Peterka '534 in view of Khandelwal.

At page 17 of the Office Action it is argued that Peterka '534 discloses "*discover said hardware registry, said plurality of entries and said plurality of APIs ("...an application can learn what types of resources are available..." Col. 2, Ln. 55-57, Col. 3, Ln. 23-25).*" Applicant disagrees.

Peterka '534 does not disclose discovering a plurality of APIs with a software application. (Claim 12 has been amended by this paper to further clarify this limitation.) Rather, at col. 2, lines 52-60 Peterka '534 discloses that the "*ResourceRegistry is a convenient place where an application can learn what types of resources are available*" {emphasis added}; at col. 4, lines 23-25 Peterka '534 indicates that the "*ResourceRegistry is the single place where a downloaded application must go to learn about existing resources*" {emphasis added}; and at col. 6, lines 1-8 Peterka '534 states "*a downloadable application may ask the ResourceRegistry what types of resources are available on the terminal*" {emphasis added}.

Hence, Peterka '534 merely discloses an application learning what *types* of resources are available by going to the Resource Registry, and does not in any way disclose the application discovering *the software interfaces themselves*.

Applicant further notes that it is the software interface (e.g., API) in Peterka '534 which is used to discover the hardware registry. For example, at col. 3, lines 41-45 Peterka '534 indicates that:

"*the present invention relates to an application programming interface (API) that provides a uniform mechanism for gaining access to resources (ResourceRegistry), managing multiple resources of the same type (ResourceTypeManager) and accessing the individual resource's management state and status (GenericResource and ObjectState).*" {emphasis added}

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Hence, Peterka '534 discloses a single, uniform API which is used to (i) determine the available resources (by accessing the *ResourceRegistry*), and (ii) manage these resources (via the *ResourceTypeManager*). In contrast, the invention of Claim 12 provides a plurality of data or entries relating to at least one hardware feature, and a plurality of APIs that can be used to access and control the at least one hardware feature. The software application in Claim 12 enables discovery of the at least one hardware feature and the API which will be used to access it. There is no need in Peterka '534 to provide the ability of the API to discover other APIs as set forth in Claim 12, because it is the same API which accesses the *ResourceRegistry* as that which subsequently utilizes the resources.

At page 18 of the Office Action, it is also asserted that Khandelwal discloses "...wherein said CPE is configured to be utilized within a multiple systems operator (MSO) network and receive said software application (Applications 192) via download from said network after installation of said CPE with a consumer premises (figures 3/4A (Cable Provider (MSO) 120) Col. 4 Ln. 58-67, Col. 5 Ln. 1-18)." Applicant disagrees.

At col. 4, line 58 – col. 5, line 18, Khandelwal merely discloses enabling a customer, MSO and manufacturer to define various settings within a policy file. Per col. 5, lines 19-26, the customer accesses the policy file via the Internet. Even if one were to assume the policy file manager application in Khandelwal corresponds generally to the software application of Claim 12 (a point which Applicant does not concede), nowhere does Khandelwal disclose the application being downloaded to the CPE after installation thereof. Rather, the application remains at the headend, and is merely accessed by the CPE using the Internet.

Although the software application (EPG) 192 in Khandelwal is downloaded to the CPE after installation thereof into the consumer premises, the EPG application cannot reasonably be argued to refer to the application set forth in Claim 12. The EPG in Khandelwal is simply not configured to discover, access, and/or selectively control, as is recited in Claim 12. By this paper, Applicant has amended Claim 12 to more clearly recite this distinction.

Accordingly, Claim 12 as amended herein distinguishes over the art of record on multiple distinct bases, and is therefore not rendered obvious thereby.

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**Claim 41** – Applicant respectfully traverses the §103 rejection of Claim 41 as being unpatentable over Peterka ‘534 in view of Khandelwal.

At page 18 of the Office Action, the Office argues that Peterka ‘534 discloses “...said at least one record further identifying at least one application programming interface (API) for interface with said DVR functionality (“...ResourceRegistry...” Col. 2 Ln. 55-60, “...API...” Col. 3 Ln. 1-3, Ln. 41-45, ResourceRegistry 100 Col. 4 Ln. 22-25, Col. 6 Ln. 1-8)...” Applicant disagrees.

Peterka ‘534 does not disclose at least one record identifying at least API for interface with the DVR functionality. Rather, in Peterka ‘534, the *ResourceRegistry* merely provides information regarding the available resources (see e.g., col. 2, lines 55-60). Peterka ‘534 does not in any way disclose the *ResourceRegistry* as also providing information regarding any APIs for accessing, manipulating or otherwise using the available resources.

Further, at col. 3, lines 41-45, Peterka ‘534 discloses that it is the same API which is used to determine the available resources (by accessing the *ResourceRegistry*) that is used to access and manage these resources. Hence, there is simply no need in Peterka ‘534 to provide information in the *ResourceRegistry* regarding an API which may be used to access the resources because the very same API which accesses the *ResourceRegistry* utilizes the resources.

Therefore, Claim 41 distinguishes over Peterka ‘534 and Khandelwal and is not rendered obvious.

**Claim 43** – Applicant respectfully traverses the §103 rejection of Claim 43 as being unpatentable over Peterka ‘534 in view of Khandelwal.

It is argued at page 21 of the Office Action, that Peterka ‘534 discloses “accessing said hardware registry using said application to identify said API (“...access/use one or more of the available resources...” Col. 2 Ln. 57-60, Col. 3 Ln. 1-3, Col. 6 Ln. 1-8).” Applicant disagrees.

Peterka ‘534 does not disclose identifying an API using a software application. Rather, Peterka ‘534 merely discloses that the *ResourceRegistry* is used by an application to determine what types of resources are available (see e.g., col. 2, lines 52-60). (See also Peterka ‘534 col. 4,

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lines 23-25 and col. 6, lines 1-8.) Thus, Peterka '534 merely discloses an application learning what *types* of resources are available by going to the *ResourceRegistry*, and does not in any way disclose the application identifying an API by accessing the *ResourceRegistry*.

5 Still further, in Peterka '534, the API which is used to access the hardware registry is the same API which is used to manage or make use of the resources (see e.g., col. 3, lines 41-45 "*...an application programming interface (API) that provides a uniform mechanism for gaining access to resources (*ResourceRegistry*), managing multiple resources of the same type (*ResourceTypeManager*) and accessing the individual resource's management state and status (*GenericResource* and *ObjectState*).*" {emphasis added}). Clearly, Peterka '534 does not disclose  
10 accessing the hardware registry using an API in order to identify the API. There is no need in Peterka '534 for the API to use the registry to identify other APIs, because it is the same API which accesses the *ResourceRegistry* in Peterka '534 as that which subsequently utilizes the resources. Furthermore, control of the hardware in Peterka '534 is provided using only the uniform API, and does not require at least one application and at least one API as is recited in  
15 Claim 43.

At page 21 of the Office Action, it is further argued that Peterka '534 discloses "*wherein said consumer premises device comprises a device not associated with said cable network ("...terminal..." Col. 1 Ln. 19-34, Col. 2 Ln. 17-18), and said act of controlling is performed substantially by said cable network-provided application ("...downloadable applications..." Col. 3 Ln. 46-48, Col. 4 Ln. 23-25, Col. 6 Ln. 1-8: NOTE: the downloadable applications are downloaded over a cable network to a receiver or set-top box that is not part of the cable network).*" Applicant respectfully disagrees.

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Even if one were to assume *arguendo* that Peterka '534 discloses downloadable application downloaded over a cable network (a point which Applicant does not necessarily concede), nowhere does Peterka '534 teach or suggest these being downloaded to a device not  
25 associated with the cable network. Rather, the Office has failed to provide an indication as to where the reference teaches or suggests a device not a part of the cable network. One cannot reasonably argue that the reference teaches or suggests the set-top box or receiver not being associated with the cable network.

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Accordingly, the Office's position is not properly supported by the teachings of the reference and therefore Claim 43 is not rendered obvious.

5       **Claims 45-46** – Without addressing the merit or propriety of the §103 rejections of Claims 45-46 with respect to Peterka '534 and/or Khandelwal, Applicant has by this paper cancelled Claims 45-46 without prejudice, thereby rendering the rejections thereof moot.

10       4. Per page 24 of the Office Action, Claims 19 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hensgen, et al. (U.S. Patent Application Publication No. 2003/0009769; hereinafter "Hensgen") in view of Peterka '534. In response thereto, Applicant provides the following remarks.

15       **Claims 19 and 21** – Without addressing the merit or propriety of the §103 rejections of Claims 19 and 21 with respect to Hensgen and/or Peterka '534, Applicant has by this paper cancelled Claims 19 and 21 without prejudice, thereby rendering the rejections thereof moot.

20       5. At page 26 of the Office Action, Claims 22 and 30 stand rejected as being unpatentable over Peterka '534 in view of Carney, et al. (U.S. Patent Application Publication No. 2004/0003400; hereinafter "Carney"). Applicant provides the following in response thereto.

**Claim 22** – Applicant respectfully traverses the §103 rejection of Claim 26 as being unpatentable over Peterka '534 in view of Carney.

25       At page 27 of the Office Action, it is argued that Peterka '534 discloses "*discovering said at least one hardware registry and said at least one software interface with said at least software application ("...ResourceRegistry is a convenient place where an application can learn what types of resources are available, and retrieve a Resource Type Manager for a specific type of resource..." Col. 2 Ln. 54-60, Col. 3 Ln. 11-14, Col. 4 Ln. 23-25, Col. 6 Ln. 1-8).*" Applicant disagrees.

      Peterka '534 does not disclose discovering a hardware registry and a software interface



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using a software application. Instead, in Peterka '534 the *ResourceRegistry* is accessed by an API to determine what types of resources are available (see e.g., col. 2, lines 52-60, col. 4, lines 23-25, and col. 6, lines 1-8). The same API in Peterka '534 (which accesses the registry) is then used to manage or make use of the resources (see e.g., col. 3, lines 41-45 “...an application programming interface (API) that provides a uniform mechanism for gaining access to resources (*ResourceRegistry*), managing multiple resources of the same type (*ResourceTypeManager*) and accessing the individual resource's management state and status (*GenericResource* and *ObjectState*).” {emphasis added}). Thus, even if one assumes that the API in Peterka '534 comprises a software application for discovering a hardware registry, the API does not also discover a software interface (i.e., the API does not discover itself).

Still further, at page 27 of the Office Action, it is argued that Peterka '534 discloses “responsive to said discovering, controlling said at least one hardware option using said application and said at least one interface (“...*ResourceRegistry* is a convenient place where an application can learn what type of resources are available, and retrieve a *Resource Type Manager* for a specific type of resource...” Col. 2 Ln. 54-60, Col. 3 Ln. 11-14, Col. 4 Ln. 23025, Col. 6, Ln. 1-8).” Applicant disagrees.

Control of the hardware in Peterka '534 is provided using only the uniform API (see e.g., col. 3, lines 41-45). If one were to assume *arguendo* that the API discussed in Peterka '534 corresponds to the software interface of Claim 22, as discussed above, nowhere does Peterka give a separate software application. Further, in Peterka '534 there is no need for a software application (as a separate entity from the API) for controlling the hardware option because, in Peterka '534, a single API accesses the *ResourceRegistry* and subsequently utilizes the resources.

Therefore, Claim 22 is respectfully not rendered obvious given Peterka '534 in view of Carney.

**Claim 30** – Without addressing the merit or propriety of the §103 rejection of Claim 30 with respect to Peterka '534 and/or Carney, Applicant has by this paper cancelled Claim 30 without prejudice, thereby rendering the rejection thereof moot.

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6. At page 29 of the Office Action, Claims 23-25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Carney in view of Meandzija. Applicant provides the following remarks.

5           **Claims 23-25** – Without addressing the merit or propriety of the §103 rejections of Claims 23-25 with respect to Peterka ‘534 and/or Carney, Applicant has by this paper cancelled Claims 23-25 without prejudice, thereby rendering the rejections thereof moot.

10           7. Per page 32 of the Office Action, Claims 26-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Evans in view of Meandzija.

Without addressing the merit or propriety of the §103 rejections of Claims 26-27 with respect to Evans and/or Meandzija, Applicant has by this paper cancelled Claims 26-27 without prejudice, thereby rendering the rejections thereof moot.

15           8. Per page 34 of the Office Action, Claims 31-33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Peterka ‘534 in view of Carney and Peterka, et al. (U.S. Patent No. 6,948,183; hereinafter “Peterka ‘183”).

20           Without addressing the merit or propriety of the §103 rejections of Claims 31-33 with respect to Peterka ‘534, Carney, and/or Peterka ‘183, Applicant has by this paper cancelled Claims 31-33 without prejudice, thereby rendering the rejections thereof moot.

25           9. At page 37 of the Office Action, Claims 34-35 stand rejected as being unpatentable over Peterka ‘534 in view of Peterka ‘183. In response thereto, Applicant provides the following remarks.

**Claim 34** – Applicant respectfully traverses the §103 rejection of Claim 34 as being unpatentable over Peterka ‘534 in view of Peterka ‘183.

At page 38 of the Office Action, it is argued that Peterka ‘534 discloses “*responsive to said discovering, controlling said DVR hardware using said at least application and said at least*

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one software interface (“...an application can determine how many, and which, resources are available and possibly access/use one or more of the available resources...” Col. 2 Ln. 57-60).”

Applicant disagrees.

5 Peterka ‘534 specifically discloses using a uniform API for accessing the hardware registry and controlling the hardware. Per col. 3, lines 41-45, “*the present invention relates to an application programming interface (API) that provides a uniform mechanism for gaining access to resources (ResourceRegistry), managing multiple resources of the same type (ResourceTypeManager) and accessing the individual resource’s management state and status (GenericResource and ObjectState).*” {emphasis added}. In other words, Peterka ‘534 discloses a  
10 single, uniform API which is used to (i) determine the available resources (by accessing the ResourceRegistry), and (ii) manage these resources (via the ResourceTypeManager). The Office asserts that the API in Peterka ‘534 corresponds to the at least one application used to control the DVR hardware in Claim 34 (see page 38 of the Office Action). However, there is simply no teaching or suggestion in Peterka ‘534 of a software interface and at least one application  
15 controlling the DVR hardware in Peterka ‘534.

Further, Peterka ‘534 teaches away from its combination with a reference which discloses utilizing more than one or a non-uniform API, for the reasons discussed *supra*.

Therefore, Claim 34 is not rendered obvious given Peterka ‘534 and/or Peterka ‘183, whether taken alone or in combination.

20 10. Per page 39 of the Office Action, Claims 36-37 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Peterka ‘534 in view of Peterka ‘183 and Carney.

Applicant respectfully submits that the §103 rejections of dependent Claims 36-37 are rendered moot, given the arguments discussed above with respect to independent Claim 34.

25 11. Per page 40 of the Office Action, Claim 38 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Meandzija in view of “The Case for Run-Time Types in Generic Java” by Allen, et al. (pages 1-6; hereinafter “Allen”). Applicant provides the following remarks in response thereto.

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**Claim 38** – Without addressing the merit or propriety of the §103 rejection of Claim 38 with respect to Meandzija and/or Allen, Applicant has by this paper cancelled Claim 38 without prejudice, thereby rendering the rejection thereof moot.

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12. At page 41 of the Office Action, Claims 39-40 stand rejected as being unpatentable over Meandzija in view of Allen and Evans.

Without addressing the merit or propriety of the §103 rejections of Claims 39-40 with respect to Meandzija and/or Allen, Applicant has by this paper cancelled Claims 39-40 without prejudice, thereby rendering the rejections thereof moot.

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13. At page 43 of the Office Action, Claim 44 stands rejected as being unpatentable over Peterka '534 in view of Khandelwal and Ellis, et al. (U.S. Patent Application Publication No. 2004/0103434; hereinafter "Ellis").

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Applicant respectfully submits that the §103 rejection of dependent Claim 44 is rendered moot, given the arguments and amendments discussed above with respect to independent Claim 43.

#### *Other Remarks*

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Applicant hereby specifically reserves all rights of appeal (including those under the Pre-Appeal Brief Program), as well as the right to prosecute claims of different scope in another continuation or divisional application.

25

Applicant notes that any claim cancellations or additions made herein are made solely for the purposes of more clearly and particularly describing and claiming the invention, and not for purposes of overcoming art or for patentability. The Examiner should infer no (i) adoption of a position with respect to patentability, (ii) change in the Applicant's position with respect to any claim or subject matter of the invention, or (iii) acquiescence in any way to any position taken by the Examiner, based on such cancellations or additions.

Furthermore, any remarks made with respect to a given claim or claims are limited solely

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to such claim or claims.

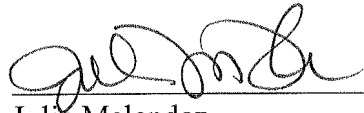
If the Examiner has any questions or comments which may be resolved over the telephone, he is requested to call the undersigned at (858) 675-1670.

5 Respectfully submitted,

GAZDZINSKI & ASSOCIATES, PC

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